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*** START OF THE PROJECT GUTENBERG EBOOK, A DISSERTATION ON HORSES ***

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Summary: Osmer shows us, by what he argues against, the primitive state of horse-breeding in England where a superstitious belief in bloodline with no attention to conformation rules. This is difficult for the modern reader to even visualize, after the late 19th century development of conformation norms for all breeds of animal. Notable for a description of horse raising and use among the nomad Arabs, evidence of the survival of the ancient Nisaeen breed in Turkey, and stories of the Godolphin Arabian.

Transcriber's Note: I have retained most of the original spellings, as it may be valuable to see how such things have changed over the centuries. These odd spellings are marked with a double asterisk (**) not referencing any sort of note. The use of capitalization or all-caps is as in the original.

A

DISSERTATION

on

HORSES:

wherein it is demonstrated, by Matters of Fact, as well as from the Principles of Philosophy, that INNATE QUALITIES do not exist, and that the excellence of this Animal is altogether mechanical and not in the Blood.

By WILLIAM OSMER

London:

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A Dissertation on Horses

Whoever supposes that Mess. Heber and Pond, or even Mr. John Cheney, were the first who published accounts of Horse-racing, will find himself much mistaken, for there lived others above a hundred years before them, who not only published accounts of Horse-racing, but acquainted us with the history of the wrestling, backword-playing, boxing, and even foot-racing, that happened in their days; and from them we learn also who were the victors, and how the racers came in.

Amongst these, lived a man whose name was Homer, a blind or obscure man (for they are synonymous** terms) who occasionally published his book of sports, and to him we are obliged also for the pedigree of many Horses that were esteemed the best in his time. This man was said to be poor, in little esteem, and to travel about the country to sell his books; but though his circumstances were very low, his understanding, it seems, was not, for he always took care to pay his court to the great personages wherever he came, and to flatter them in the blood of their Horses. But though he was little esteemed in his life-time, yet his book of pedigrees and genealogy of Horses was thought so useful, that he was greatly honoured for it after his death. And what is more strange, though the place of his nativity was unknown, and no country would receive him as a member of their community when living, yet when dead, many nations contended for the honour of it; but whatever arguments each country may produce for the support of its claim, nothing is more evident than that he was an Englishman; and there is great reason to believe he was

born somewhere in the North, though I do not take upon me to say it absolutely was so. His partiality however, to that part of the kingdom, is manifest enough, for he pretended to say, that a good racer could be bred in no place but the North; whereas, late experience has proved that to be a very idle notion. But as the northern gentlemen were the first breeders of racing Horses, so it is very probably they were also the first subscribers to his book, and then we shall find his partiality might arise, either from his gratitude to these gentlemen, or from its being the place of his nativity, or perhaps from both.

There was in the North in his time, a very famous Stallion called Boreas: Whether the present breeders have any of that blood left, I do not certainly know; but Homer, to flatter the owner, who was a subscriber to his book, and always gave him two half guineas instead of one, fabled that this same Boreas begot his colts as fleet as the wind. This to be sure will be looked upon as nothing more than a matter of polite partiality to his benefactor: But it is much to be feared, this partiality has not been confined to persons alone; for there is reason to believe, that in many cases, he has varied the true pedigree of his Horses, and (not unlike our modern breeders) has left out one cross that has been thought not good, and substituted another in its room held more fashionable.

We have an account in one of his books, (I forget the year when it was published) of a very famous chariot-race, that was run over Newmarket between five noblemen; and though it was the custom at that time to run with a two-wheeled chaise and pair only, instead of four, we find all other customs nearly the same. The names of the Horses are given us, their pedigrees, and the names of the drivers; the course is marked out, judges appointed, betts** offered, but no crossing or jostling allowed; a plain proof they depended on winning from the excellence of their Horses alone. But though a curricule and pair was then the fashion, there lived at that time a strange mad kind of fellow, haughty and overbearing, determined that no body should do anything like himself, who always drove three; and though the recital of this circumstance may be considered as trivial, or little to the purpose, we shall find something in the story worth our attention, and with respect to Horses, a case very singular, such a one as no history, no tradition, nor our own experience has ever furnished us with a similar instance of.

It seems these three Horses were so good that no Horses in the kingdom would match them. Homer, after having been very lavish in their praise, has given us their names, and the pedigree of two of them, which it seems were full brothers. He tells us, they were as swift as the wind, and in his bombast** way of writing, says they were immortal; which expression is exactly of the same style and meaning with our modern phrase high-bred, and could mean nothing else, because in the recital of the pedigree, he tells us, they were got by this same North-country Horse before mentioned, called Boreas, and out of a flying Mare called Podarge. But the

singularity of this case is, that the third Horse, whom he calls Pedasus**, was absolutely a common Horse, and of no blood. Here I beg leave to make use of Mr. Pope's words, who, in his translation, speaking of those Horse, says thus:

"Who like in strength, in swiftness, and in grace,
"A mortal courser match'd th'immortal race."

Now as nothing is more certain, than that no Horses but those of blood can race in our days, I have long been endeavouring to find the true reason of this singular instance, and cannot any way account for it, but by supposing this equality of strength and elegance might produce an equality of swiftness. This consideration naturally produced another, which is, that the blood of all Horses may be merely ideal; and if so, a word of no meaning. But before I advance any thing more on this hypothesis, and that I may not be guilty of treason against the received laws of jockey-ship, I do here lay it down as a certain truth, that no Horses but such as come from foreign countries, or which are of extraction totally foreign, can race. In this opinion every man will readily join me, and this opinion will be confirmed by every man's experience and observation.

But in discussing this point, I shall beg leave, when speaking of these Horses, to change the word HIGH-BRED, and in its room substitute the word foreigner, or of foreign extraction. For perhaps it may appear, that the excellence we find in these Horses depends totally on the mechanism of their parts, and not in their blood; and that all the particular distinctions and fashions thereof, depend also on the whim and caprice of mankind.

If we take a Horse bred for the cart, and such a one as we call a hunter, and a horse of foreign extraction, and set them together, the meanest judge will easily point out the best racer, from the texture, elegance, and symmetry of their parts, without making any appeal to blood. Allow but a difference in the texture, elegance, and symmetry of parts in different Horses, whose extraction is foreign, this principle will be clearly proved, and the word HIGH-BRED is of no use, but to puzzle and lead us astray: and every man's daily observation would teach him, if he was not lost in this imaginary error, particular blood, that, generally speaking, such Horses who have the finest texture, elegance of shape, and the most proportion, are the best racers, let their blood be of what kind it will, always supposing it to be totally foreign. If I was asked what beauty was, I should say proportion: if I was asked what strength was, I should say proportion also: but I would not be understood to mean, that this strength and beauty alone will constitute a racer, for we shall find a proper length also will be wanted for the sake of velocity; and that moreover the very constituent parts of foreign Horses differ as much from all others, as their performances. But this, however, will be found a truth; that in all Horses of every kind, whether designed to draw or ride, this principle of proportion will determine the principle

of goodness; at least to that part of it which we call bottom. On the other hand, our daily observation will shew us, that no weak, loose, disproportioned Horse, let his blood be what it will, ever yet was a prime racer. If it be objected, that many a plain ugly Horse has been a good racer; I answer that all goodness is comparative; and that such Horses who have been winners of plates about the country, may be improperly called good racers, when compared to some others: but I can even allow a very plain Horse to be a prime racer, without giving up the least part of this system: for instance if we suppose a Horse (with a large head and long ears, like the Godolphin Arabian) a low mean forehead, flat sided, and goose rumped, this, I guess, will be allowed a plain ugly Horse; but yet if such a Horse be strong, and justly made in those parts which are immediately conducive to action; if his shoulders incline well backwards, his legs and joints in proportion, his carcass strong and deep, his thighs well let down, we shall find he may be a very good racer, even when tried by the principles of mechanics, without appealing to his blood for any part of his goodness. We are taught by this doctrine of mechanics, that the power applied to any body, must be adequate to the weight of that body, otherwise, such power will be deficient for the action we require; and there is no man but knows a cable or chord of three inches diameter is not equal in strength to a chord of four inches diameter. So that if it should be asked why a handsome coach Horse, with as much beauty, length, and proportion as a foreign Horse, will not act with the same velocity and perseverance, nothing will be more easily answered, without appealing to blood; because we shall find the powers of acting in a foreign Horse much more prevalent, and more equal to the weight of his body, than the powers of acting in a coach Horse: for whoever has been curious enough to examine the mechanism of different Horses by dissection, will find the tendon of the leg in a foreign Horse is much larger than in any other Horse, whose leg is of the same dimensions; and as the external texture of a foreign Horse is much finer than of any other, so the foreign Horse must necessarily have the greatest strength and perseverance in acting, because the muscular power of two Horses (whose dimensions are the same) will be the greatest in that Horse, whose texture is the finest.

Let us next inquire what information we can gather from the science of Anatomy, concerning the laws of motion: it teaches us, that the force and power of a muscle consists in the number of fibres of which it is composed; and that the velocity and motion of a muscle consists in the length and extent of its fibres. Let us compare this doctrine with the language of the jockey: he tells us, if a Horse has not length, he will be slow; and if made to slender, he will not be able to bring his weight through. Does not the observation of the jockey exactly correspond with this doctrine? If we now inquire into the motion of Horses, we shall find the bones are the levers of the body, and the tendons and muscles (which are one and the same thing) are the powers of acting applied to these levers. Now when we consider a half-bred

Horse running one mile or more, with the same velocity as a Horse of foreign extraction, we do not impute that equality of velocity to any innate quality in the half-bred Horse, because we can account for it by external causes: that is by an equality of the length, and extent of his levers and tendons. And when we consider a half-bred Horse running one mile, or more, with the same velocity as the other, and then giving it up, what shall we do? shall we say the foreigner beats him by his blood, or by the force and power of his tendons? or can we, without reproaching our own reason and understanding, impute that to be the effect of occult and hidden causes in the one of these instances and not in the other? both of which are demonstrated with certainty, and reduced to facts by the knowledge of anatomy and the principles of mechanics.

How many instances have we of different Horses beating each other alternately over different sorts of ground! how often do we see short, close, compact Horses beating others of a more lengthened shape, over high and hilly coursed, as well as deep and slippery ground; in the latter of which, the blood is esteemed much better, and whose performances in general are much better!

And how comes it to pass that Horses of a more lengthened shape, have a superiority over Horses of a shorter make, upon level and flat courses? Is this effected by the difference of their mechanical powers, or is it affected by the blood? if, by the latter, then this blood is not general, but partial only, which no reasoning man will be absurd enough to allow. But I much fear our distinctions of good and bad blood are determined with much partiality; for every jockey has his particular favourite blood, of which he judges from events, success, or prejudice: else, how comes it to pass, that we see the different opinions and fashions of blood varying daily! nay, we see the very same blood undergoing the very same fate; this year rejected, the next in the highest esteem; or this year in high repute, the next held at nothing. How many changes has the blood of Childers undergone! once the best, then the worst, now good again! Where are the descendants of Bay Bolton, that once were the terror of their antagonists! Did these prevail by the superiority of their blood, or because their power and their fabric was superior to the Horses of their time? If any one ask why Danby Cade was not as good a racer as any in the kingdom, the jockey could not impute this defect to his blood; but if it should be imputed to his want of proportion, surely it might be held for a true and satisfactory reason. How many revolutions of fame and credit, have all sportsmen observed in these HIGH-BRED families.

Numberless are the examples of this kind which might be quoted, but to account for this, one says, The blood is wore out for want of a proper cross; another tells us, That after having been long in this climate, the blood degenerates; but these reasons cannot be true, because we see the off-spring of all crosses, and of the most antient** families, occasionally triumphant over the sons of

the very latest comers, the error then will not be found in the blood, or in the proper crossing; but the defect will be produced by the erroneous judgment of mankind, in putting together the male and female with improper shapes; and while we are lost and blinded by an imaginary good, the laws of nature stand revealed; and we by paying a proper attention thereto, and employing our judgment therein, might wipe this ignis fatuus from the mind, and fix the truth on a sure foundation. Our observation shews us, that on the one hand, we may breed Horses of foreign extraction too delicate, and too slight for any labour; and on the other hand, so coarse and clumsy, as to be fitter for the cart than the race. Shall we then wonder these cannot race, or shall we doubt that degrees of imperfection in the mechanism, will produce degrees of imperfection in racing! and when we find such deficient, shall we ridiculously impute it to a degeneracy of that blood, which once was in the highest esteem, or to the want of judgment in him who did not properly adapt the shapes of their progenitors!

Shall we confess this, or is the fault in nature? For though most philosophers agree, that innate principles do not exist, yet we know for certain, that in the brute creation, whose food is plain and simple, (unlike luxurious man) the laws of nature are, generally speaking, invariable and determined. If it should be asked why the sons of the Godolphin Arabian were superior to most Horses of their time; I answer, because he had a great power and symmetry of parts, (head excepted) and a propriety of length greatly superior to all other Horses of the same diameter, that have been lately seen in this kingdom; which I do not assert on my own judgment, but on the opinion of those who, I believe, understand Horses much better than I pretend to do: and 'tis very probable, this Horse, if he had not been confined to particular Mares, might have begot better racers than any he did. On the contrary, I have heard it urged in behalf of his blood, that he was a very mean Horse in figure, and that he was kept as a teizer** some years before he covered. What does this prove? I think nothing more, than that his first owner did not rightly understand this kind of Horse, and that different men differed in their opinions of this Horse's fabric.

If any man who doubts this excellence to be in the blood, should ask how it came to pass that we often see two full brothers, one of which is a good racer, the other indifferent, or perhaps bad, I know of but two answers that can be given; we must either allow this excellence of the blood to be partial, or else we must say, that by putting together a Horse and a Mare, different in their shapes, a foetus may be produced of a happy form at one time, and at another the foetus partaking more or less of the shape of either, may not be so happily formed. Which shall we do? shall we impute this difference of goodness in the two brothers, to the difference of their mechanism? or shall we say this perfection of the blood is partial? If the latter, then we must own that blood is not to be relied on, but that the system of it, and whatever is built on that foundation, is precarious and uncertain, and

therefore falls to the ground of its own accord. Whilst this continues to be the rule of breeding, I mean of putting male and female together, with no consideration but that of blood and a proper cross, it is no wonder so few good racers are produced, no wonder mankind are disappointed in their pleasures and expectations; for this prejudice does not only extend to blood, but even to the very names of the breeders, and the country where the Horses are bred, though it is beyond all doubt, that the North claims the preference of all other places in this kingdom; but that preference is allowed only from the multiplicity of Mares and Stallions in those parts, and from the number of racers there bred.

I would not be thought in this to prefer my own opinion of shape and make to the known goodness of any Stallion, but would prefer the latter before the opinion of all mankind. What then? It is not every Horse that has been a good racer will get good colts; some have suffered too much in their constitution by hard and continual labour, whilst others have some natural infirmity that may probably be entailed on their generation.

But the most material thing in breeding all animals, and to which we pay the least regard, either in the race of men or Horses, is the choice of the female, who not only joins in the production of the foetus, but in the formation of it also. And that the female has even the greatest share in the production of the foetus, will be proved by this instance: if you take a dunghill cock and put to a game hen, and also put a brother of that game hen to a sister of the dunghill cock, those chickens bred from the game hen will be found much superior to those chickens bred from the dunghill hen.

And here I beg leave to be allowed (without the imputation of pedantry) one quotation from Virgil, who is supposed to have well understood the laws of nature. In his description of the choice of animals for procreation, in the third chapter of his *Georgic's*, and the 49th verse, you will find it thus written:

"Seu quis Olympiacea mieratus praemia palme,
"Pascit Equos, feu quis fortes ad aratra Juvencos,
"Corpora praecipue matrum legat."

But I should not escape the censure of the critics on this occasion, I expect the thanks of all the handsome well-made women in the kingdom, for this hint, who understand Latin; and where they do not, I hope their paramours will instill the meaning of it, as deeply as they can into them. But to return to the breeding of Horses.

We pay little regard to the mechanism of the female, or of the Horse to which we put her, but generally choose some particular Horse for the sake of the cross, or because he is called an Arabian; whereas, in fact, every Stallion will not be suited to every Mare, but he who has a fine female, and judgment enough to

adapt her shapes with propriety to a fine male, will always breed the best racer, let the sort of blood be what it will, always supposing it to be totally foreign. The truth of this will be confirmed by our observation, which shews us, that Horses do race, and do not race, of all families and all crosses.

We find also, that affinity of blood in the brute creation, if not continued too long in the same channel, is no impediment to the perfection of the animal, for experience teaches us, it will hold good many years in the breed of game cocks. Besides, we know that Childers, which was perhaps the best racer ever bred in this kingdom, had in his veins a consanguinity of blood; his pedigree informing us, that his great grandam was got by Spanker, the dam of which Mare was also the dam of the said Spanker.

If we inquire a little farther into the different species of the creation, we shall find this principle concerning perfection of shape still more verified. Amongst game cocks we shall find, that wheresoever power and propriety of shape prevails most, that side (condition alike) will generally prevail. We shall find also, that one cock perfectly made, will beat two or three of his own brothers imperfectly made. If any man should boast of the blood of his cocks, and say that the uncommon virtue of this animal, which we call game, is innate, I answer no, for that all principles, and all ideas arise from sensation and reflection, and are therefore acquired.

We perceive this spirit of fighting in game chicken, which they exert occasionally from their infancy; even so it is amongst dunghill chickens, though not carried to that degree of perseverance.

When arrived at maturity, we see these different birds will still continue to fight if they meet; if I should be asked why the perseverance of fighting in one does not continue to death, as in the other, I answer, that from a different texture of the organs of the body, different sensations will arise, and consequently different effects be produced; and this will be proved by instances from the best of those very cocks which are called game, who (it is well know) when they suffer a variation in their texture, or as cockers term it, become rotten, run away themselves, and their descendants also; which sensation of fear could not be produced by any alteration in the body, if this principle of game was innate.

Amongst men, do we not perceive agility and strength stand forth confessed in the fabric of their bodies? do not even the passions and pleasures of mankind greatly depend on the organs of their bodies? Amongst dogs, we shall find the foxhound prevailing over all others in speed and in bottom; but if not in speed, in bottom at least I hope it will be allowed. To what shall we impute this perfection in him? Shall we impute it to his blood, or to that elegance of form in which is found no unnecessary weight to

oppress the muscles, or detract from his ability of perseverance? if to blood, from whence shall we deduce it? or from what origin is it derived? Surely no man means more, when he talks of the blood of foxhounds, than to intimate that they are descended from such, whose ancestors have been eminent for their good qualifications, and have shone conspicuous in the front of the pack for many generations.

But allowing this system of blood to exist in hounds and Horses, let us consider how inconsistently and differently we act with respect to each; with respect to hounds, if when arrived at maturity, we think them ill shaped and loosely made, we at once dispose of them without any trial, well knowing they will not answer our expectations: whereas, in Horses, let the shape be what it will, we are persuaded to train, because the jockey says they are very HIGH-BRED. If we now compare the blood of Horses with that of dogs, shall not we find the case to be similar? will not the origin be as uncertain in Horses as in dogs? it is true, in some foreign countries they have long pedigrees of their Horses as well as we, but what proofs have they themselves of this excellence of the blood in one Horse more than another of the same country? I never heard they made any trial of their Horses in the racing way, but if they did, their decision would be as uncertain as ours with respect to the blood, because their decision must be determined by events alone, and therefore, by no means a proper foundation whereon to build a system, or establish a fact, which can be accounted for by causes.

The jockeys have an expression which, if this system be true, is the most senseless imaginable: I have heard it often said, Such a Horse has speed enough if his heart do but lie in the right place. In answer to this, let us consider a Horse as a piece of animated machinery (for it is in reality no other); let us set this piece of machinery going, and strain the works of it; if the works are are** not analogous to each other, will not the weakest give way? and when that happens, will not the whole be out of tune? But if we suppose a piece of machinery, whose works bear a true proportion and analogy to each other, these will bear a greater stress, will act with greater force, more regularity and continuance of time. If it be objected, that foreign Horses seldom race themselves, and therefore it must be in the blood, I think nothing more easily answered; for we seldom see any of these Horses sent us from abroad, especially from Arabia, but what are more or less disproportioned, crooked, and deformed in some part or other; and when we see this deformity of shape, can we any longer wonder at their inability of racing: add to this, many of them are perhaps full-aged before they arrive in this kingdom; whereas, it is generally understood, that a proper training from his youth is necessary to form a good racer.

But be this as it will, let us consider how it happens, that these awkward, cross-shaped, disproportioned Horses, seemingly contrary to the laws of nature, beget Horses of much finer shapes than

themselves, as we daily see produced in this Kingdom. And here I acknowledge myself to have been long at a loss how to account for this seeming difficulty.

I have been often conversant with travelers, concerning the nature and breed of these Horses; few of whom could give any account of the matter, from having had no taste therein, or any delight in that animal: but, at length, I became acquainted with a gentleman of undoubted veracity; whose word may be relied on, whose taste and judgment in Horses inferior to no man's.

He says, that having spent a considerable part of his life at Scanderoon and Aleppo**, he frequently made excursions amongst the Arabs; excited by curiosity, as well as to gratify his pleasures. (The Arabs, here meant, are subjects of the grand seignior**, and receive a stipend from that court, to keep the wild Arabs in awe, who are a fierce banditti**, and live by plunder.) He says also, that these stipendiary Arabs are a very worthy set of people, exactly resembling another worthy set of people we have in England called Lawyers; for that they receive fees from both parties; and when they can do it with impunity, occasionally rob themselves. These Arabs encamp on the deserts together in large numbers, and with them moves all their household**; that these people keep numbers of greyhound, for the sake of coursing the game and procuring their subsistence: and that he has often been with parties for the sake of coursing amongst those people, and continued with them occasionally for a considerable space of time. That by them you are furnished with dogs and horses; for the use of which you give them a reward. He says they live all together; men, horses, dogs, colts, women, and children. That these colts, having no green herbage to feed upon when taken from the mare, are brought up by hand, and live as the children do; and that the older Horses have no other food, than straw and choped** barley, which these Arabs procure from the villages most adjacent to their encampments. The colts, he says, run about with their dams on all expeditions, till weaned; for that it is the custom of the Arabs to ride their mares, as thinking them the fleetest, and not their horses; from whence we may infer, that the mare colts are best fed and taken care of. That if you ask one of these banditti to sell his mare, his answer is, that on her speed depends his own head. He says also, the stone colts are so little regarded, that it is difficult to find a Horse of any tolerable size and shape amongst them.

If this then is the case, shall we be any longer at a loss to account for the deformity of an animal, who, from his infancy, is neglected, starved, and dried up, for want of juices? or shall we wonder that his offspring, produced in a land of plenty, of whom the greatest care is taken, who is defended from the extremity of heat and cold, whose food is never limited, and whose vessels are filled with the juices of the sweetest herbage, shall we wonder, I say, that his offspring, so brought up, should acquire a more perfect shape and size than his progenitor? or if the Sire is not

able to race, shall we wonder that the Son, whose shape is more perfect, should excel his Sire in all performances?

But there is another reason why many of the very finest of these foreign Horses cannot race: our observations of them will shew us, that though their shoulders in general exceedingly incline backwards, yet their fore-legs stand very much under them; but in different Horses this position is more or less observable. This, (when I considered the laws of nature) appeared to me the greatest imperfection a Stallion could possibly have: but when this gentleman informed me it was the custom of the Turks always to keep each fore-leg of the Horse chained to the hinder one, of each side, when not in action, I no longer considered it as a natural, but an acquired imperfection. Shall we now wonder that such an one, though ever so well made in other respects, cannot race in spite of all his blood? But the custom of the Arabs in this respect, he says, his memory does not extend to. I well remember this to be the case of the Godolphin Arabian when I saw him, who stood bent at knees, and with his fore-legs trembling under him: such is the case of Mosco's grey Horse in some degree. In our country we frequently see Horses stand pawing their litter under them with their fore-feet; our custom to prevent it is to put hobbles on their fore-legs, and this will produce the same position in a greater or less degree, though not so conspicuous as in some of those foreign Horses, who have been habituated from their youth to this confined method of standing. His royal highness the duke of Cumberland has a very remarkable instance of this, in a Horse called Muley Ishmael, which is otherwise, the most elegant Horse I ever yet beheld. Whether this position is natural or acquired, will be best determined by his produce. Suppose now this Horse should be tried, and found no racer, shall he be condemned as a Stallion, and the fault imputed to his blood; or on the other hand, if his colts are strait** upon their legs, and found to be good racers, shall the perfection of such colt be imputed to the blood of the father, when we can account for speed in the one, and the want of it in the other, from the different attitude of each Horse? We are further acquainted, that the Horses we call Turks, are in reality Arabs; that the true Turkish Horse, is a large, heavy, majestic animal, of no speed, designed to ride on for state and grandeur; that it is the custom of the bashaws in Arabia occasionally to choose, from their provinces, such colts as they like, and send them to the grand seignior's stables which they do at their own price, and which the Arabs, who breed them, look upon as a very great hardship. These colts are again picked and culled, after having been some time in the grand seignior's stables, and the refuse disposed of at his pleasure, so that the fine Horses found in the possession of the Turks, are either some of these which are cast from the grand seignior's stables, or which the Turks buy from the Arabs whilst they are young. And he farther acquaints us with the reason why the Turks choose these Arabian Horses when young, because, if continued long in the hands of the Arabs, they are small, stunted, and deformed in shape; whereas, when brought into Turkey, a land

of greater plenty than the deserts of Arabia, they acquire a greater perfection both of size and shape. Now, whether these Turks and Arabs are of the same or different extraction, may perhaps be very little to our purpose; but it is absurd to suppose that providence has bestowed a virtue on a part only of this species produced in any one country, (which species was undoubtedly designed for the use of man) and that mankind should not be able, in any age, to determine with precision this virtue, or fix any criterion, whereby to judge with any certainty.

Seeing then, this is the case, how shall we account for the various perfection and imperfection in the breed of these foreign Horses; for we perceive it not determined to those of Turkey, Barbary, or Arabia, but from each of these countries some good, some bad Stallions are sent us? What shall we do? Shall we continue to impute it to the good old phrase of blood, the particular virtue of which, no man ever yet could ascertain, in any one particular instance, since Horses were first created? or shall we say that nature has given these foreign Horses a finer texture, a finer attitude, and more power than any other Horses we know of; and that these very Horses, and their descendants always did, and always will surpass each other in speed and bottom, according to their different degrees of power, shape, elegance, and proportion? But there is also a certain length determined to some particular parts of this animal, absolutely necessary to velocity, of the particularity and propriety of which length, all jockeys appear to be intirely** ignorant, from the latitude of their expression, which is that a racer must have length somewhere.

If I might now be allowed to give my opinion of this propriety of length, I should say it consisted in the depth and declivity of the shoulders, and in the length of the quarters and thighs, and the insertion of the muscles thereof. The effect of the different position or attitude of the shoulders in all Horses, is very demonstrable: if we consider the motion of a shoulder, we shall find it limited to a certain degree by the ligamentous and the tendinous parts, which confine it to its proper sphere of acting; so that if the shoulder stand upright, the Horse will not be able to put his toes far before him, but will acquire only such a particular degree of space at each step or movement; but if the shoulders have a declivity in them, he cannot only put his toes farther before him, but a greater purchase of ground will be obtained at every stroke.

The certainty of this effect in the declivity of the shoulders will be known by every man's observation; and it is also easily demonstrated by the principles of mechanics, by which we learn, that if a weight is applied to a pulley, in order to shut a door, and that weight be allowed to fall immediately and perpendicularly from the door, it will not pull it too with that velocity as it will do if an angle be acquired, and the weight pass over a wheel removed to a very little distance from the door.

Nevertheless, there is no general rule without exception, for we now and then find a Horse to be a good racer, who has not this declivity in his shoulders, but from a length in his thighs and quarters has a sufficient share of speed. Add to this, there is another advantage obtained to the Horse besides velocity by this declivity of the shoulders, for his weight is removed farther back, and placed more in the center of his body, by which an equilibrium is acquired, and every muscle bears a more equal share of weight and action; so that the nearer the articulation of the quarters approach to the superior part of the shoulders, so much the shorter will the back be, and as much more expanded as the chest is, so much stronger will the animal be, and will also have a larger space for the organs of respiration to exert themselves.

But I would not be understood to mean, that the shortness of the back, or capacity of the chest, will constitute a racer; far from it: but that in any given and proportioned length, from the bosom of the Horse to the setting on of the dock, the nearer the superior points of the shoulders approach to the quarters, so much better able will the carcass be to sustain and bring through the weight; and as much as the shoulders themselves prevail in depth, and the quarters and thighs in length, so much greater will be the velocity of the Horse, because a greater purchase of ground is hereby obtained at every stroke.

It is by this propriety of length, strength of carcass, and the power of the muscles, that foreign Horses excel all others, and it is by the same advantages they excel each other also, and not by any innate virtue, or principle of the mind, which must be understood by the word blood, if any thing at all is intended to be understood by it; and this is a truth every man would be convinced of, if he would divest himself of partiality to particular blood, and confide in his own observation of Horses and their performances.

Sedbury was an instance of this great power, in whom we find all the muscles rising very luxuriant, and with a remarkable prominence. The famous Childers was a like instance of it. These two Horses were remarkably good, but we have been absurd enough to condemn the blood of both at various times; in one, because he had bad feet, and entailed that defect on the generality of his offspring; in the other, because most people who bred from that lineage, were running mad after a proper cross, when they should have been employed in thinking only of propriety of shape.

I am very far from desiring to be thought a superior judge of this animal, but I will be bold to say, that according to these principles of length and power, there never was a Horse (at least that I have seen) so well entitled to get racers as the Godolphin Arabian; for whoever has seen this Horse, must remember that his shoulders were deeper, and lay farther into his back, than any Horse's ever yet seen; behind the shoulders, there was but a very

small space; before, the muscles of his loins rose excessively high, broad, and expanded, which were inserted into his quarters with greater strength and power than in any Horse I believe ever yet seen of his dimensions. If we now consider the plainness of his head and ears, the position of his fore-legs, and his stunted growth, occasioned by the want of food in the country where he was bred, it is not to be wondered at, that the excellence of this Horse's shape, which we see only in miniature, and therefore imperfectly, was not so manifest and apparent to the perception of some men as of others.

It has been said, that the sons of the Godolphin Arabian had better wind than other Horses, and that this perfection of the wind was in the blood. But when we consider any Horse thus mechanically made, whose leavers acquire more purchase, and whose powers are stronger than his adversaries, such a Horse will be enabled by this superiority of mechanism, to act with greater facility, and therefore it is no wonder that the organs of respiration (if not confined or straitened more than his adversaries) should be less fatigued. Suppose now, we take ten mares of the same, or different blood, all which is held equally good, when the Mares are covered, and have been esteemed so long before, and put to this Godolphin Arabian, let us suppose some of the colts to be good racers, and others very inferior to them; shall we condemn the blood of these mares which produced the inferior Horses? If so, we shall never know what good blood is, or where it is to be found, or ever act with any certainty in the propagation of this species, and it is this ridiculous opinion alone of blood, that deceives mankind so much in the breed of racers. If we ask the jockey the cause of this difference in the performance of these brothers, he (willing to account some how for it) readily answers, that the blood did not nick; but will a wise and reasoning man, who seriously endeavours to account for this difference, be content with such a vague, unmeaning answer, when, by applying his attention to matters of fact, and his observation to the different mechanism of these brothers, the difference of their performance is not only rationally, but demonstratively accounted for?

But if this excellence of the racer should really be in the blood, or what is called the proper nicking of it, I must say, it is a matter of great wonder to me, that the blood of the Godolphin Arabian, who was a confined Stallion, and had but few Mares, should nick so well as to produce so many excellent racers; and that the blood of his son Cade, who has had such a number of Mares, and those, perhaps, the very best in the kingdom, should not nick any better than it seems to have done; for I do not conceive the performances of the sons of Cade to have been equal in any respect to the sons of the Godolphin Arabian; though I do not pretend to determine this myself, but shall leave it to the opinion of mankind.

The question then is, whether this excellence of Horses is in the

blood or the mechanism; whoever is for blood, let him take two brothers of any sort or kind, and breed one up in plenty, the other upon a barren heath; I fancy he will find, that a different mechanism of the body will be acquired to the two brothers by the difference of their living, and that the blood of him brought up on the barren heath, will not be able to contend with the mechanism of the other, brought up in a land of plenty. Now if this difference of shape will make a difference in the performance of the animal, it will be just the same thing in its consequences, whether this imperfection of shape be produced by scarcity of foot, or entailed by the laws of nature; if so, does it signify whether the colt be got by Turk, Barb, or what kind of blood his dam be of? or where shall we find one certain proof of the efficacy of blood in any Horse produced in any age or any country, independent of the laws of mechanics.

If it should be urged, that these foreign Horses get better colts than their descendants, that therefore the blood of foreign ones is best, I answer, no; for that according to the number of foreign Stallions we have had in this kingdom, there have been more reputed and really bad than good ones, which would not happen in the case of Horses, who come from the same country, and are of the same extraction, if this goodness was in the blood only. But the true reason why foreign Horses get better colts than their descendants, if they do get better, is that (mechanism alike) their descendants from which we breed, are generally such Horses as have been thoroughly tried, consequently much strained, and gone through strong labour and fatigue; whereas the foreign Horse has perhaps seldom or never known what labour was; for we find the Turk a sober grave person, always riding a foot pace, except on emergencies, and the Arab preferring his Mare to his Horse for use and service. As a proof of this truth, let us take two sister hound bitches, and ward them both with the same dog; let us suppose one bitch to have run in the pack, and the other by some accident not to have worked at all, it will be found that the offspring of her who has never worked, will be much superior to the offspring of her who has run in the pack.

All I have now to ask of my brother jockeys is, that for the future, when speaking of these Horses, they will, instead of the phrase HIGH-BRED, say only well-bred, and that they will not even then be understood to mean any thing more by it, than that they are descended from a race of Horses, whose actions have established their goodness: and that I may have leave to prefer my opinion of the mechanical powers of a Horse, to all their opinions concerning blood, which is in reality no more than a vain chimera. If these things are so, have not we and our fore-fathers been hoodwinked all our days by the prevalence of a ridiculous custom, and the mistaken system, when by consulting our own reason and understanding, this mist of error had fled before it? If this mechanical power was considered as it ought to be, it would excite a proper emulation amongst all breeders: and when the excellence in the breed of Horses was found to be the effect of judgment, and

not of chance, there would be more merit as well as more pleasure in having bred a superior Horse. Add to this, mankind by applying their attention to this mechanism of animals, would improve their judgment in the laws of nature, and it would not only produce a much better breed of racers than any we have yet seen, but the good of it would extend to all sorts of Horses throughout the kingdom of what kind soever. It is a cruel thing to say, but yet a very true one, that amongst the present breed of Horses in this nation, a man of any tolerable judgment can hardly find one in fifty fit for his purpose, whether designed to draw or ride; whereas if the purchasers would endeavour to make themselves masters of this mechanism, the breeders of every kind of Horses must consult it also, or keep their useless ones in their own hands, which I conceive would be a proper punishment for their ignorance.

And now the author appeals not to the illiterate and unlearned (whose obstinacy is too great to receive instruction, and whose prejudices are too strong to be obliterated by any reasons) but to the candid and impartial inquiry of reasoning and unprejudiced men into these principles, and hopes this may be a means of exciting some more able pen, to vindicate a truth so many ages buried in darkness. If aught conducive to the pleasure or use of manking shall accrue from these hints, he will think himself happy; on the other hand, if the principles here advanced should prove erroneous, and any man be kind enough to point out the fallacy of them, he will kiss the rod with cheerfulness** and submission.

FINIS.

*** END OF THE PROJECT GUTENBERG EBOOK, A DISSERTATION ON HORSES ***

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